Managing Political Differences in Social Media

Catherine Grevet[1], Loren Terveen[2], Eric Gilbert[1]

[1]School of Interactive Computing
and GVU Center
Georgia Institute of Technology
{cgrevet, gilbert}@cc.gatech.edu

[2]Department of Computer Science
and Engineering
University of Minnesota
terveen@cs.umn.edu

ABSTRACT

Most people associate with people like themselves, a process called *homophily*. Exposure to diversity, however, makes us more informed as individuals and as a society. In this paper, we investigate political disagreements on Facebook to explore the conditions under which diverse opinions can coexist online. Via a mixed methods approach comprising 103 survey responses and 13 interviews with politically engaged American social media users, we found that participants who perceived more differences with their friends engaged less on Facebook than those who perceived more homogeneity. Weak ties were particularly brittle to political disagreements, despite being the ties most likely to offer diversity. Finally, based on our findings we suggest potential design opportunities to bridge across ideological difference: 1) support exposure to weak ties; and 2) make common ground visible while friends converse.

Author Keywords

Social media; homophily; politics; Facebook; self-censorship; tie strength; relationship management

ACM Classification Keywords

H5.3. Group and Organization Interfaces; Asynchronous interaction; Web-based interaction.

INTRODUCTION

People tend to befriend and stay connected to others who have similar interests and values [25, 26]. This phenomenon, called *homophily,* is a widely studied social process [21]. While congregating with like-minded others can confer strong emotional support [21], inwardly focused groups also risk tunnel vision and an inability to challenge their own views [24, 32]. Exposure to diverse opinions often makes people more informed and engages society in healthy deliberation [19, 32].

CSCW and HCI work has explored ways to increase exposure to diverse views. Novel algorithms and interaction design can present a mix of political perspectives in news aggregators [22], or can introduce people to others with different views [10]. This growing line of social computing work recognizes that design has the potential to nudge people towards more diverse viewpoints. Yet, systems in widespread production often reinforce homophily (e.g., Amazon's product recommendations, Facebook friend suggestions). Systems like these make suggestions based on similar interests, often creating an "echo chamber" [10]. This has also been shown in many large-scale network analyses (e.g., [1, 21]). To date, our online social life mimics our offline inclination to associate with people like us.

However, social networks are not entirely homogeneous. Three quarters (73%) of social media users have disagreed with a friend's post [25]. People already cohabitate in online communities with friends who hold different opinions. How do they make it work? Sometimes, of course, it ends with the nuclear option: unfriending. Other times, social media strengthens friendships [8, 17]. Social media enables these relationships to be expressed and maintained, despite inevitable disagreements.

We are interested in the intricacies of relationships in the context of political discussions on social media because—when they work out—they suggest the conditions under which diverse opinions can coexist online. In this paper, we present a systematic investigation of heated political discussions via social media. In 2013, three contentious federal events rattled the political landscape in the United States: budget cuts, gay marriage debates, and gun control regulations. It is in this political climate that we studied how Facebook users manage relationships with people who hold different opinions. Our mixed methods study comprises 103 survey responses and 13 phone interviews about Facebook usage and friendships during these events with social media users who have strong political opinions.

We find that our participants who perceive more friends as holding viewpoints different to their own *engage less on Facebook* than those with more similarity in their network. Echoing earlier social science work [20], we also find that weak ties *talk about politics less often*, and are brittle when

those conversations happen. In other words, weak ties can easily break under pressure from contentious discussions.

Turning to design interventions, we suggest that *making common ground visible* (i.e., highlighting past interactions and shared interests) during contentious discussions could alleviate in-the-moment tension. Namely, our data suggest that this intervention could keep an argument from over-shadowing a history of friendship. We also suggest opportunities to *increase exposure and engagement between weak ties* to make them more resilient in the face of political disagreement. The primary contribution of this work is an exposition of opportunities and pitfalls for social media to bridge differences.

RELATED WORK
Our inquiry was informed by two broad topics: the prevalence of homophily in social networks and the pressing need for more political deliberation. Social computing research at the intersection of these areas can provide insights into user behavior and design innovations.

Homophily and exposure to differences
Most social networks are clustered in groups of like-minded individuals [21, 25, 26]. These groups form through deliberate actions such as associating with similar others, also known as homophily. Other more indirect processes also contribute to these congregations, such as triadic closure, via which befriending a friend of a friend is highly probable [33]. These homogeneous groups are prevalent offline due to geographical, cultural, professional, and interest-based associations [21]. Cloistering with similar others may be reassuring, but this tendency can magnify already extreme views and exacerbate polarization [22, 31]. Some exposure to more diverse views can bring about new sources of information and lead to more educated decisions.

Despite the lack of physical constraints, homophily is also a widespread phenomenon online [15, 21]. Much work has shown the prevalence of the *"echo chamber"* or *"filter bubble"* effects in social network sites [10, 13]. Many widespread systems recommend people or content based on similar interests, intensifying these effects [10]. This results in our online social life mimicking our offline tendency of associating with similar others, a finding validated by many large-scale network analyses (e.g. [1, 21]).

Political discussions and public deliberation—a healthy part of democratic societies [19, 25]—face challenges online. The Internet has many communities designed for political expression, such as political blogs [13, 23], comments on political articles, or through channels administered by U.S. government officials [18, 27]. Yet, the echo chamber effect largely hinders access to dissenting views [1, 13]. Exposing people to more diverse political opinions is a growing line of work in interaction design.

Bridging across differences
Work in CSCW and HCI has looked into bridging across these political differences [2, 10, 15, 19, 21, 22, 30]. Novel algorithms and interaction design can present a mix of political perspectives in news aggregators [22], or can introduce people to others of different views [10]. Some of these interactive systems have demonstrated the potential to support political deliberation [19, 30]. For example, systems can support weighing multiple sides of issues [19].

The design of these systems rests on conflicting and complex findings. First of all, displaying opposing views can polarize people even more strongly towards their original position [22, 31]. Second, some people explicitly seek out different opinions, while others are "challenge adverse", seeking content that matches their own views [12, 22]. Finally, people of different views might use different terminology to explain political concepts [2]. Systems design has made great progress, yet results remain mottled. We contribute to this scholarship by simply asking, how do people currently manage political differences?

Managing differences
Online social networks are not entirely homogeneous. Disagreeing with a friend is not uncommon. 73% of social media users report disagreeing with a friend's post [25]. In fact, people tend to overestimate similarities with their friends [15]. Discovering this discrepancy can lead to social tension. While this has only led 18% of social media users to unfriend[1], block or hide someone [25], it does not mean that the relationship remained intact. What happens to the other 82%?

Politics are extensively discussed in online communities that are not political [2, 13, 23]. In fact, 40% of the U.S. adult population reports that their friends post political content on social network sites [25], and 15% of content that users share on Facebook is political [28]. When political tensions arise in these non-political places, people tend to employ ad-hoc mechanisms to minimize animosity [13, 23]. For example, political posts on non-political blogs often contain warnings such as "please excuse my rant" [23].

In social media, people employ a variety of mechanisms to manage tensions [11]. One relevant mechanism is self-censorship, or refraining from posting [9, 28, 34]. Politics is a topic that is often self-censored [28]. A Pew study found that 72% of survey respondents did not post political links, and 66% do not post their own political thoughts on Facebook [26]. Because people tend to overestimate similarities with their friends [15], self-censorship and engagement with social media might depend on the degree of similarity that users perceive in their network.

This prior work motivates our investigation around political disagreements in social media. Homophily suggests that most people connect to others similar to them on Facebook. However, friends do not always agree. These disagreements

---

[1] The term unfriend here is referenced from the cited article. Unfriending is removing a connection on a social media platform. Other websites use different terms (e.g. unfollowing on Twitter).

are particularly salient during times of contention, such as during current news debates. Expectations of backlash may impact engagement with Facebook during these times. Furthermore, designing systems to bridge across differences merits asking how this is currently done. This leads us to our two main research questions:

R1: How do perceptions of differences affect engagement on Facebook during political events?

R2: How do people manage relationships on Facebook with friends of different political opinions?

METHODS

We conducted a mixed methods study comprising a survey and follow-up interviews. The questions were about Facebook usage and interactions with friends during political events. First, we briefly contextualize our study in the socio-technical and socio-political landscapes that frame our findings. We briefly attend to these contexts to inform future researchers of the environment that shaped our results.

Research context

The U.S. political landscape and Facebook are evolving systems. Our survey and interview questions were dependent on the specifics of these systems at the time of our study in order to elicit grounded responses from our participants. In the discussion section, we generalize from these contexts to highlight what can be learned for future designs of social media for political discourse.

We conducted the study with U.S. participants around U.S political events between March and April 2013. Prior to this, in December 14th 2012, a mass murder shooting at the Sandy Hook Elementary School in Newtown, CT spawned gun law debates. In May 2013, three states—Rhode Island, Delaware, and Minnesota—legalized gay marriage. Our study spans three controversial political events in the beginning of 2013: the federal budget cuts on March 1st, the same-sex marriage debates on March 26th and 27th, and the Senate gun control vote on April 17th. Debates started before and continued after these dates, but we used them to launch our survey.

Facebook is the most widely used online social network [11]. At the time of our study, Facebook consisted of a newsfeed, personal pages, groups, business pages, inbox for directed messages, chat system, and other add-on applications. The newsfeed was the homepage and displayed the posts from a user's network as a stream. An unknown algorithm sorted the posts in the newsfeed, possibly prioritized by posts of high potential interest and posts from close ties [7]. Personal pages could be customized with a picture and information such as birthday, religion, political affiliation, and interests. Facebook included a number of privacy controls to allow users to specify audiences for posts and pictures. At the time of this study, Facebook was rolling out new features such as Graph Search, which provided more flexibility in social searching on the site, and a new newsfeed layout with more control over filtering.

Data collection and analysis

Our study consisted of a survey administered in waves between March 1, 2013 and April 30, 2013. Each survey phase was followed by a series of semi-structured interviews with a subset of the survey respondents. In total, we obtained 103 survey responses and conducted 13 interviews. Using different events was an advantage because we could see how different types of debates affected engagement and relationship management.

Recruitment
Understanding relationship management around political differences necessitated that both parties actually had opinions. As a proxy for users with opinions about U.S. politics, we used the following recruitment criteria: *"users who posted a link to a WhiteHouse.gov petition online."* The WhiteHouse.gov website prompts signatories to share the petition link to social media. A user who broadcasts such a link broadens the petition's exposure and essentially takes a political action.

For each event, we collected tweets containing a link to a WhiteHouse.gov petition, through the Twitter search API, and selected a random sample. We then replied to tweets that were written in English. We excluded retweets to focus on personal political viewpoints, and excluded verified accounts on the off chance that a celebrity mentioning our survey would induce a snowball sample. Our reply stated that we were conducting a study about Facebook usage during a specific event. This ensured that those answering our survey were Facebook users.

Instead of using Facebook directly, we used Twitter to recruit participants. While somewhat roundabout, tweets are easily searchable, and replying to a tweet is free, which allowed us to reach a large sample. By contrast, messaging non-friends on Facebook typically costs $1—somewhat prohibitive considering normal survey response rates. We also worried that Facebook users would not consider it normative for us to message them in response to a post, especially when many might not realize they made the post publicly searchable. This also allowed us to obtain a range of behaviors on Facebook: those who post about politics on Facebook and those who withhold.

Survey instrument
Our questionnaire[2] was constructed around our two research questions and included a total of 34 questions. Some questions were optional and some were conditional. To answer our question about how perceived differences affected Facebook usage, we asked participants about how many of their friends they thought had different opinions from them about the event. To answer this question, participants selected a range of percentage (e.g. 0-9%, 10-19% etc). We asked about their frequency of usage of Facebook, the amount of posts and comments they made, and whether

---

[2] Link to survey: http://comp.social.gatech.edu/hsurvey.pdf

Perceived difference	Interpretation	N
0%-29%	High perceived homogeneity	51
30%-59%	Mixed perceived homogeneity	43
60%-100%	Low perceived homogeneity	9

Table 1. Grouping by how much difference our participants perceived in their Facebook friend network.

	Budget cuts Mar. 1st	Same-sex marriage Mar. 26th	Gun laws debates Apr. 17th	Total
Sample	500	700	700	1,900
Responses	19	42	42	103
Response rate	3.8%	5.8%	5.8%	5.4%
Female	9 (47%)	21 (51%)	26 (62%)	54%
Age 18-40	13 (68%)	29 (69%)	24 (57%)	64%
Age >40	6 (32%)	13 (31%)	18 (43%)	36%

Table 3. Demographics of survey responders. We sent the survey to 1,900 Twitter users and obtained 103 responses (5.4% response rate).

they joined a group or liked a politician's page. If they had made a post, we asked whether they set privacy settings on that post. Then, we asked questions about a specific relationship by prompting: *Think about one friend in particular who has a different opinion from you about the event to answer the following questions.* Here, we asked participants about how close they felt to this person on a 5-point likert scale, following previous work [7, 14]. Other questions in this section pertained to the frequency of communication with this friend, and whether their relationship changed after the event. Finally, our questionnaire also included demographic questions, such as the number of Facebook friends and general political orientation. The questionnaire was customized for the specific political event under consideration by simply replacing the name of the event; the questions were the same for each event.

Our survey responses were self-report data: no data was collected directly from Facebook. We aimed to address this limitation [3] by providing a link to participants' Facebook account and Facebook activity logs, and explicitly asking them to open their account while answering our questions. In the interview we also encouraged participants to open Facebook and to browse their friends' pages. Moreover, the survey and interview were conducted within a two-week timeframe, which aimed to be as close to the debate as possible to address recall issues. By encouraging the use of Facebook during the survey and interview, we believe the responses we obtained corresponded to existing relationships and actual experiences, which is the crux of our findings. It is possible that participants misreported some of their usage of Facebook.

Tie strength	Interpretation	N
1-2	Weak ties	45
3-5	Strong ties	57

Table 2. Grouping by tie strength.

	Liberal	Moderate	Conserv.	None	Total
Social	67 (65%)	14 (14%)	19 (18%)	3 (3%)	103
Econ.	48 (47%)	22 (21%)	30 (29%)	3 (3%)	103

Table 4. Political orientation of survey responders. We grouped responses from Very Liberal and Liberal together; and responses from Very Conservative and Conservative together. Our participants leaned more liberally overall. This was more pronounced for social issues than economic issues.

Data analysis
We grouped survey responses for Facebook usage based on perceived differences, and for relationships, we grouped on tie strength:

For perceived difference (Table 1), we clustered responses into three groups: few friends perceived different (0%–29% of friends with different opinions) that included 49% of our participants; many friends perceived different (30%–59% of friends with different opinions) that included 42% of our participants; and most friends perceived different (60%–100% of friends with different opinions) that included 9% our the participants.

For tie strength (Table 2), we clustered responses into two groups: weak ties (reported tie strength as 1 or 2) that included 44% of participants; and strong ties (reported tie strength as 3, 4 or 5) that included 56% of participants. One participant could not think of a friend with different opinions, thus this section contains 102 survey responses.

Survey respondent demographics
Via our recruitment process described above, we sent our survey to 1,900 unique Twitter users. We received 103 responses, corresponding to a response rate of 5.4% (see Table 3). About half (54%) of our respondents were female, and two thirds of our participants (64%) were under 40. This is representative of Facebook users [11]. In addition, our participants tended skew liberal (65% on social issues and 47% on economic issues), also consistent with the demographics of social network sites [25] (see Table 4). However, social media users tend to be biased towards being educated, more liberal, younger, and more politically engaged than the general population [26]. Our study is based on political events happening in the United States, so cultural characteristics of American politics might affect our results. Our recruitment methods did not reach individuals who were not willing to discuss politics online; we leave this for future work in the *Limitations* section. By

targeting politically engaged users, we might have also biased our sample towards diversity seekers [22].

A preliminary overview of our participant data shows that most of them perceive their friends to be similar to them. This parallels homophily research: people tend to associate with people similar to them. In addition, our data suggest that interacting with people of different political opinions was a common experience. The fact that our participants could relate to the experience of dealing with a friend of different opinion could be biased by our population sample of politically active users. This could be due to homophily (they would be most likely to be friends with others of strong political opinion) or because they were more attuned to noticing posts about politics. Most participants (71%) did not frequently talk about politics with their friends of differing opinion. Though many (60%) did see something they did not agree with, and did not comment on it. Facebook was a place to talk about politics: 79% of the survey respondents posted at least one thing during the political events. Privacy controls to limit posts to a small audience were rarely used [29]. Participants preferred to not post anything rather than set a privacy setting.

Follow-up interviews and analysis
Survey participants could choose to provide us with their contact information for a follow-up interview. From this, we interviewed 13 participants. The interview was scheduled for 1 hour and participants received $30 for their time. We conducted all the interviews over the phone, and participants were encouraged to open Facebook to support recall during the interview.

The interviews were semi-structured. The script was followed rather consistently. Questions asked during the interview centered around similar issues as those asked in the survey, but with more depth. In the interview, participants were asked about multiple relationships. We conducted an inductive thematic analysis of individual interview questions [5]. To do this, we familiarized ourselves with the interviews through transcribing and contrasting the interviews with the survey data.

IMPACT OF DISAGREEMENTS ON FACEBOOK USAGE
Our first research question was: *How do perceptions of differences affect engagement on Facebook during political events?* We obtained one to three relationships per interviewee, amounting to 33 dyads total. From our analysis of these interactions, we found that perceptions of similarities shaped behaviors during political events that left few opportunities to be exposed to differing opinions.

Logging on
Those who perceived more friends as different logged on to Facebook less than those who perceived high homogeneity, $\chi^2(4, N = 103) = 10.05$, $p = 0.04$. With a large number of dissenting friends, Facebook was less welcoming during political events:

I mean it can be overwhelming just being on Facebook [...]. Just like the number of people participating [...], and it was just like there's no room to voice an opinion from either side when I guess your newsfeed, your friends are just going crazy like that. (P8)

This could be one reason that political discussions online happened in an echo chamber: those with an overwhelming number of friends with different opinions are not as present. This is not to say that these friends are never present. Rather, they are not present when it is most critical, during a debate, both as an active participant and as a viewer. One participant who logged on to Facebook more frequently than usual indicated that this was due to confounding factors like other news happening at the same time. Thus, perceptions of being in the minority directly decreased the desire to log on to Facebook while perceiving high homogeneity didn't have a noticeable effect.

Joining conversations
Those who had more friends of perceived different opinions posted fewer comments on their friends' Facebook posts during the political events than those who perceived higher homogeneity, $\chi^2(2, N = 103) = 5.61$, $p = 0.06$. In addition, users who perceived a large number of their friends to have different opinions self-censored more than those who perceived their friends to be more similar to them, $\chi^2(2, N = 103) = 8.37$, $p = 0.01$. Participating in conversations around political debates often amounted to avoiding confrontation and siding with like-minded friends.

Confrontation resulting in agreeing to disagree
Facebook arguments were described as long, emotional, and confrontational. Often, they resulted in friends "agreeing to disagree." The following quote illustrates an example of this occurrence:

We'll have conversations that reach 80 comments. Um... and like most political debates on Facebook it doesn't just stick to gun control, you go all over the map and then end up back on the same spot where you were and then we just agree to disagree. (P12)

Many of the survey respondents noted that there was "no point" in engaging with friends of different opinion on Facebook because they couldn't "change their mind." These dead-end conversations were described as unproductive and unappealing, meaning that most chose to avoid engaging in them.

Lightweight cues to show support
Rather than joining heated debates, some participants wanted to show support without inviting confrontation. A simple comment or "liking" a post could provide an opportunity to show support in a semi-private setting:

I think like one friend wrote [how she felt] I might have commented like I do too, or like word or something like that so more so like I did those things so that friends [...] know that they're supported by me. But um.. people

who are against it I didn't comment back or debate you know with them. (P6)

One participant mentioned "liking" a friend's posts as a "thumbs up" indicator that does not invite dissenting opinions. The appropriation of these lightweight cues to show support could increase polarization in two ways: 1) explicitly taking an action to side with a party (likely strengthening their own position), and 2) limiting the possibility for someone on the other side to confront them.

Too much agreement is uninteresting
In some cases, participants limited their postings to things that brought new insights, or just stayed away all together when there was a noticeable echo chamber effect:

I honestly didn't see a whole lot of point in posting anything else related to it because pretty much everyone was in agreement that it was an idiotic thing. (P2)

I like to keep [my friends] on top of what's going on and so I usually what they post I've maybe seen somewhere already so I consider them just an echo chamber. (P12)

This illustrates that overwhelming agreement can also cause people to hold back from posting on Facebook during political events. Munson et al. [22] found that providing some dissenting opinions in a news aggregator could be engaging for diversity seekers. Having a balance of pro and con posts could help engagement on Facebook during political events. Rather than showing extremes, all supporting or all dissenting posts, people could see a subset of each side of the argument to present a more nuanced display of opinions – this would especially help with weak ties as we will see next.

Changing someone's mind on Facebook
Our findings show that Facebook is a difficult place to maintain a friendship with someone who has different opinions during times of heated political debates. During those times, Facebook can feel like a hostile environment, conversations can quickly get stale, and the opportunities to show support with like-minded others overshadow the opportunities to engage with people of different opinion. One participant mentioned that changing a fundamental belief would happen in the context of a strong relationship, such as one between father and son rather than through weak ties – the types of relationships fostered by Facebook:

I feel like when people change their opinion about stuff like that it happens within the context of a relationship that can't be cultivated through an online connection. [...] Like when you hear about politicians who have changed their minds because their son came out. (P6)

Prior work has shown that friendships influenced behavior on a voting website [6]. We see here that stronger offline ties might have more impact on political attitudes. However, Facebook was the only way that some of our participants communicated with their friends of different opinion. Relationships that are maintained solely through Facebook are particularly vulnerable.

IMPACT OF DISAGREEMENTS ON RELATIONSHIPS
Our second research question was: *How do people manage relationships on Facebook with friends of different political opinions?* Hearing dissenting voices on Facebook created challenges, especially for weak ties. From our participants, we found that weak ties of different opinion communicated less often about politics in general than strong ties of different opinion, $\chi^2(3, N = 102) = 10.27$, $p = 0.02$. This matches Granovetter's theories about tie strength [16]. However, when they did communicate there were challenges. These experiences sometimes made our participants change their opinion about the friends. Other times, it resulted in questioning the relationship and ultimately disassociating from the friend. This was confirmed by our survey results in which we found that more people felt that their relationship had changed with weak ties than with strong ties.

Withdrawing from friends online
Our participants reported a number of negotiations employed to manage relationships with friends of different opinions. Rather than engaging with their friends, our participants discussed ways in which they actively avoided confrontation.

Unfriending, blocking, hiding
Most drastically, ending a friendship can be the result of a heated political argument. Among the 33 dyads mentioned during the interview, three were no longer friends. These relationships were all weak ties based on past common background, such as high school friends and they had not seen each other in many years. This confirms findings from [25] that people unfriend more weak ties than strong ties.

Unfriending was not an option with close family. Instead of unfriending her brother, P1 hid his posts from her newsfeed meaning that his posts no longer appeared in her social stream:

I feel like unfriending my brother on Facebook would cause a lot of strife. Whereas staying friends with him causes frustration but just for me. (P1)

They saw each other in person on a frequent to occasional basis and removing them from Facebook could cause friction in the relationship. Simply hiding him was a better alternative because he wouldn't be aware of the fact that she altered the state of their connection.

Avoiding the topic
In some cases, participants knew not to talk about politics based on previous experiences. This meant that they were more careful when talking to their friend, perhaps making explicit choices about topics that should not be discussed:

I don't really talk about anything with her other than like small talk and work things that are you know are required. (P9)

On Facebook, selectively hearing from the other person is difficult to control. As we saw from our participants, these are not people who they never want to hear from. In the

case of hiding someone from the newsfeed, it might be beneficial to provide timed hiding so that the hiding can only take effect during a particularly tense time.

Lack of communication as a form of communication
In some cases, unfriending is not an option and hiding someone from the newsfeed is not necessary. Rather, the way to manage the relationship is to stop talking:

> *Just because I stopped arguing with you does not mean that I agree with you. And I find that that's very very true online. People take ... you know when you stop arguing that must mean that they won, it's like no, [laughs] it's because I'm not arguing anymore. (P13)*

One aspect of social media is that it is easy to withdraw from friends, and that the in-person nuances of withdrawing are less easily interpreted online.

Changing perceptions
In our interviews, about 30% of the dyads changed their perception of their friend after the event. From the survey responses, more people felt that their relationship had changed with weak ties than with strong ties $\chi2(1, N = 102) = 7.68, p = 0.0056$. These changes happened after realizing that their friend had a position they did not know, or that their friend was not being as rational as usual:

> *We all grew up in the same general neighborhood in the same general background. You know nobody was particularly wealthy or over privileged but [...] these two women had married into a lot of money and it changed them. And that was very evident in the types of things they wrote on Facebook [...] those are the kinds of things that shocked me. (P9)*

In contrast, friends who were closer knew where the other stood and these conversations were minor compared to the overall friendship:

> *I guess you look at it like a bank account right. And over the years he's made so many donations [...]And we build a good friendship. And so when he does once in awhile gets, you know, ugly it's a small withdrawal and so he's not been corrupting the bank. [...] we'll get heated but the thing is afterwards we, you know, hug it out and that's about it (P12)*

It may be more helpful, during times of contentious discussions, to pull out common ground aspects of each person's profile. Relating on shared experiences or common values to keep perspective on differences. One of our participants experienced this during our interview. She was navigating Facebook as she was answering our questions. When we asked her to talk about a friend, she pulled up the friendship page that aggregates Facebook information about her and her friend's profile highlighting similarities, pictures tagged in together, and wall posts:

> *This Facebook [friendship page feature] is really interesting. We both like "To Kill a Mockingbird" and the Bible and music. (P6)*

This brought forward the reasons they were friends in the first place. Through reminiscing on these aspects of her friendship that were documented on Facebook, she remembered character strengths that she might consider to be "deposits in the friendship bank account." Elements that are displayed on the friendship page could be highlighted while friends communicate. This could mean leveraging the Friendship page, as a more readily available resource.

For many weak ties Facebook was the only means of communication: 42% of survey respondents who mentioned weak ties communicated with them on Facebook at least once a month, while 4% communicated by email, 4% saw each other in person, and none talked over the phone. This means that our participants gathered impressions of their weak ties almost solely based on Facebook behavior. As this participant suggests, the ability to relate and sympathize may be different in person than online:

> *"You're not able to see the look in someone's eye or um... hear their tone. I feel like some of the Christians that I know who are against marriage equality [...] they genuinely do love people. And I hear that in their voice, and I hear that tension in their voice because they know how they sound and they don't want to sound that way. Like I hear it. And you can't express that online. Like you can hear it face to face, but you can't express it online. There's just something missing that can't be captured through a screen" (P6)*

By studying these relationships in specific events of contention, we highlighted some of the tensions around managing relationships with dissenting friends. Recalling past history was a way to settle the shock of unexpected behavior, or putting the relationship into perspective by rationalizing the reasons that caused the difference. Showing common ground and allowing more opportunities to engage with weak ties could strengthen these bonds.

DISCUSSION
The behaviors of our participants around contentious events revealed effects of increased polarization and congregating with like-minded others. Those with the minority opinion in their group of friends disappeared from the conversation, and weak ties, those most likely to present different views, were more brittle to these arguments. Together, they create politically like-minded cloisters in social media.

We found that all our participants could relate to an experience of political contention on Facebook. These experiences caused significant struggles, from trying to rationalize the behavior of a friend to deciding whether to terminate the friendship. As we saw in our results, when politics appear on Facebook there is currently more opportunity for politically engaged users to become more polarized rather than to converse with the other side.

Our first design implication is *making common ground visible* (i.e., highlighting past interactions and shared interests). Past research has shown that weak ties are important for getting access to information and being exposed to other ideas [16]. Yet, supporting communication between weak ties is delicate. Our finding that weak ties primarily communicate through Facebook echoes previous work [14]. Thus as the medium through which these relationships are expressed and maintained, Facebook has the potential of helping people stay in contact with weak ties. Through bringing common ground to light, such as displaying a past history of the friendship next to an argument could help alleviate some tensions.

Second, *increasing exposure and engagement between weak ties* could make them more resilient in the face of political disagreement. Not only are people mainly friends with like-minded others, but their few friends of different opinions will not expose them to other views. Bursting the filter bubble could happen in existing social networks, simply by hearing the voices of those with different opinions. The absence of dissenting friends from the debate means missed potential for discussion and deliberation; this reinforces the echo chamber. On Facebook's newsfeed, where the algorithm for displaying posts is unknown, this effect might be redoubled: people who do not communicate with each other do not appear in each other's newsfeed. Rather than showing extremes, all supporting or all dissenting posts, the newsfeed could select a subset of each side of the argument to present a more nuanced display of opinions [22]. We speculate that these changes could bring more weak ties to light since they are the ones who are less emphasized in the newsfeed currently.

Social media might be able to create bridges across ideologies. Insofar as this cross-communication currently occurs, our findings suggest that users may remove themselves from the conversation or from the website. Currently, muffling political discussions, or at least discouraging them, might create a more welcoming environment. This has the consequence of further digging trenches between friends of differing opinions. Designing social media towards nudging users to strengthen relationships with weak ties of different opinions could have beneficial consequences for the platform, for users, and for society.

LIMITATIONS AND FUTURE WORK
Our participants present the biases of heavy social media users and a politically engaged population. They might have been more sensitive to political posts, and held stronger reactions to political disagreements than less politically inclined users. Future work could focus on two other populations: people who aren't heavy social media users (how do they stay in contact with friends of dissenting views?), and people who don't have strong political opinions. Studying the conditions under which friends of different opinion can coexist in social media suggests implications for designing bridges between homogeneous clusters.

We measured perceptions of similarity in our participant's network. A follow-up study could focus on how actual homophily affects behavior around political events. This would require data from actual user profiles. Prior work has found that people perceive greater homogeneity than what is actually present, meaning that people perceive their friends to be more similar to them than they actually are [15]. Designing systems that rectify this gap could bring to light the hidden diversity in one's social network.

Lastly, our study was culturally specific. The dual-party system and binary polarization that ensues is possibly unique to the U.S. Moreover, cultural aspects of the U.S. might exacerbate differences across party lines such as the ease of mobility and choice of lifestyle [4] that makes political issues have deep ramifications in personal choices and social associations.

CONCLUSION
By talking directly to users about their experiences with politics on Facebook, we were able to see what network analysis studies cannot: co-existing online with people of different opinions is a constant negotiation. Homophily is the process by which people tend to congregate with others similar to them. However, friends do not always see eye to eye. We found that our participants *engaged less on Facebook* when they felt overwhelmed by politics, and that weak ties *were fragile when they did talk* about politics. Our work contributes to prior scholarship through highlighting opportunities for social media to bridge across differences.

These opportunities posit that social media could better facilitate discussions across ideologies. We suggest opportunities to make weak ties more resilient. Calling attention to past interactions and shared interests could make common ground visible during arguments. These strategies, such as knowing when to step away, point to constant negotiations evolving around disagreements.

ACKNOWLEDGMENTS

REFERENCES
1. Adamic, L. and N. Glance, The Political Blogosphere and the 2004 U.S. Election: Divided They Blog. *Proc. LinkKDD,* 2005.

2. Baumer, E., Sinclair, J., and Tomlinson, B. "America Is Like Metamucil": Fostering Critical and Creative Thinking about Metaphor in Political Blogs. *Proc. CHI*, 2010. 1437-1446.

3. Bernard, H.R., Killworth, P., et al. The Problem of Informant Accuracy The Validity of Retrospective Data. Annual Review of Anthropology, 1984. 495-517.

4. Bishop, B., *The Big Sort: Why the Clustering of Like-Minded America is Tearing Us Apart*. 2009. Mariner Books.

5. Braun, V. and Clarke, V. Using thematic analysis in psychology. *Qualitative Research in Psychology,* 2006. 3(2): p. 77-101.

6. Brzozowski, M., Hogg, T., and Szabo G. Friends and foes: Ideological social networking. *Proc. CHI,* 2008. 817-820.

7. Burke, M. and Kraut, R. Using Facebook After Losing a Job: Differential Benefits of Strong and Weak Ties. *Proc. CSCW*, 2013. 1419-1430.

8. Burke, M., Kraut, R., and Marlow, C. Social Capital on Facebook: Differentiating Uses and Users. *Proc. CHI,* 2011. 571-580.

9. Das, S., and Kramer, A. Self-Censorship on Facebook. *Proc. ICWSM*. 2013.

10. Doris-Down, A., Versee, H., and Gilbert, E. Political Blend: An Application Designed to Bring People Together Based on Political Differences. *Proc. C&T*, 2013.

11. Duggan, M. and Brenner, J. The Demographics of Social Media Users — 2012. P*ew Internet and American Life Project*, 2013. P

12. Garrett, R.K., Echo chambers online?: Politically motivated selective exposure among Internet news users*. Journal of Computer-Mediated Communication*, 2009. 14(2): p. 265-285.

13. Gilbert, E., Blogs Are Echo Chambers: Blogs Are Echo Chambers. *Proc. HICSS*. 2008.

14. Gilbert, E. and Karahalios, K. Predicting tie strength with social media. *Proc. CHI,* 2009. 211-220.

15. Goel, S., Mason, W., and Watts, D.J. Real and perceived attitude agreement in social networks. *Journal of Personality and Social Psychology,* 2010. 99(4) 611-621.

16. Granovetter, M.S., The Strength of Weak Ties. *The American Journal of Sociology*, 1973. 78(6) 1360-1380.

17. Hampton, K., Sessions Goulet, L., et al. Social networking sites and our lives. *Pew Internet and American Life Project,* 2011.

18. Hemphill, L., Otterbacher, J., and Shapiro, M. What's Congress Doing on Twitter? *Proc. CSCW,* 2013. 877-886.

19. Kriplean, T., Morgan, J., et al. Supporting Reflective Public Thought with considerate. *Proc. CSCW*, 2012. 265-274.

20. Marsden, P.V., Core Discussion Networks of Americans. *American Sociological Review*, 1987. 52(1) 122-131.

21. McPherson, M., Smith-Lovin, L. and Cook, J.M. Birds of a feather: Homophily in social networks. *Annual review of sociology,* 2001. 415-444.

22. Munson, S. and Resnick, P. Presenting Diverse Political Opinions: How and How Much. *Proc. CHI*. 2010. 1457- 1466.

23. Munson, S. and Resnick, P. The Prevalence of Political Discourse in Non-Political Blogs. *Proc. ICWSM*, 2011.

24. Putnam, R.D. Bowling alone: the collapse and revival of American community. Simon & Schuster, New York. 2000.

25. Rainie, L. and Smith, A. Social networking sites and politics. *Pew Internet and the American Life Project,* 2012.

26. Rainie, L., Smith, A., et al., Social Media and Political Engagement. *Pew Internet and the American Life Project,* 2012.

27. Roback, A. and Hemphill, L. "I'd have to vote against you": Issue Campaigning via Twitter. *CSCW Extended Abstracts,* 2013. 259-262.

28. Sleeper, M., Balebako, R., et al. The Post that Wasn't: Exploring Self-Censorship on Facebook. *Proc. CSCW,* 2013. 793-802.

29. Stutzman, F., Gross, R. and Acquisti, A. Silent Listeners: The Evolution of Privacy and Disclosure on Facebook. *Journal of Privacy and Confidentiality*, 2013.

30. Sukumaran, A., Vezich, S., et al. Normative Influences on Thoughtful Online Participation. *Proc. CHI*, 2011. 3401-3410.

31. Sunstein, C. The Law of Group Polarization. *Journal of Political Philosophy,* 2002.

32. Sunstein, C. Republic.com 2.0. Princeton University Press, 2009.

33. Wimmer, A. and Lewis, K. Beyond and below racial homophily: ERG models of a friendship network documented on Facebook. *American Journal of Sociology*, 2010. (116) 583-642.

34. Zhao, C., Hinds, P. and Gao, G. How and To Whom People Share: The Role of Culture in Self-Disclosure in Online Communities. *Proc. CSCW,* 2012. 67-76.